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TO: Local Boards of Health and Local Health Departments

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RE: Clinical Activities Related to Infectious Disease Prevention and Control

Local boards of health have a crucial role in the prevention and control of infectious diseases in their communities.

In response to questions from local boards of health and health departments, this memorandum attempts to clarify that role and the specific functions that require clinical skills for best practice and to meet legal and regulatory requirements. It updates previous guidance characterizing activities of public health nurses employed by local boards of health.

The continued successful control of infectious diseases depends on the following duties:

- maintaining the infectious disease surveillance system,
- follow-up of disease reports,
- control of outbreaks,
- enforcement of isolation and quarantine regulations,
- ensuring treatment,
- provision and administration of vaccines,
- assurance of safe and sanitary conditions, and
- effective communication/collaboration with health care providers.

These infection disease prevention and control responsibilities help protect the safety of the public; many are mandated by statute and regulation, and depend on clinical assessment, intervention, and evaluation. These responsibilities may be critical to public health and time-sensitive in many instances, so the board of health should have a plan in place for coverage of nursing services in the event of the absence of the public health nurse (vacation, leave, position vacancy, etc.). This continuity of service strategy can be accomplished through a memorandum of understanding (MOU) with a neighboring city or town, similar to MOU's that cover public safety services.

Clinical intervention provided by nurses and other health care practitioners is critical to infection prevention and control at the community level. Broad and comprehensive training of nurses includes clinical evaluation, case management, epidemiology, community health, and health education. These skills are essential for:

- assessment
- diagnosis
- development of care plans
- administration of medications and vaccines
- disease investigation
- interpretation of signs, symptoms
- interpretation of laboratory results
- provision of health care advice and information
- formulation of disease control guidelines and strategies
- implementation of guidelines and strategies
- evaluation

While we often try to cope with insufficient public health infrastructure, we must keep in focus critical and essential clinical responsibilities. Failure to do this may result in increased risk for morbidity and mortality, the spread of infectious disease, and the compounding of cost and suffering that occurs when basic disease prevention is no longer effective.

The following is a list of responsibilities of local boards of health, established by law, regulation, and good public health practice, which require clinical knowledge, professional skills, abilities, and experience that are best conducted by a public health nurse:

- Receive notification of diseases dangerous to the public health (MGL c.111, §§6, 7, 18 and 111; 105 CMR 300.100). This requires interpretation and evaluation of clinical data. Reports must be shared with other jurisdictions where an infected individual may reside, where the patient is known to have contracted the disease, and where the patient is known to have exposed another person to the disease. This activity requires detailed knowledge of the epidemiology for a number of contagious diseases. Case investigation forms for many diseases require response to numerous and complex medical questions.

- Use the Massachusetts Virtual Epidemiologic Network (MAVEN) for case investigation and follow-up. Use of this secure electronic disease surveillance and case management system is now required by regulation (105 CMR 300.110, 105 CMR 300.160). Its use requires knowledge of infectious disease epidemiology and capacity to interpret and enter clinical information.
- Report cases of dangerous diseases to the Department of Public Health within twenty-four hours (MGL c.111, §112; 105 CMR 300.110). Clusters or outbreaks must be reported immediately to the Department (105 CMR 300.130). Requires clinical judgment as to whether the available information assists in making an adequate diagnosis.
- Treat, transport, and protect a sick person and protect the community at large in the case of a disease dangerous to the public health (MGL c.111, §§6, 7, 94A; 95, 96, 96A, 97, 104). This requires professionals trained in the care of persons with diseases dangerous to the public health.
- Consult with the Department of Public Health regarding prevention of dangerous diseases (MGL c.111, §7). This requires a clinical background to be able to investigate outbreaks, discuss disease control, and implement necessary interventions.
- Enforce isolation and quarantine regulations (MGL c.111, §§6, 95; 105 CMR 300.200). Requires communication of and correct clinical information to be communicated to individuals and a variety of institutions and public facilities, including health care facilities.
- Refer exposed individuals for rabies vaccine and treatment (MGL c.140, §145A) and administer post-exposure prophylaxis as needed.
- Maintain close contact with area physicians and other health care practitioners is essential for successful disease intervention, adequate surveillance and prevention of disease outbreaks.
- Receive reports of food poisonings and communicate these reports to the Department of Public Health (105 CMR 300.120). Requires understanding of signs and symptoms of foodborne disease and epidemiologic parameters to interpret reports, implement control interventions and provide for enforcement of Chapter X of the State Sanitary Code which regulates food service establishments (MGL c.111, §127A, 105 CMR 590.000).
- Assess, triage, prophylax and treat individuals during an infectious disease emergency. This requires knowledge of relevant exposure history, incubation period, infectious period, signs and symptoms, and management of the infection in the patient, and protection of the public from exposure.

- Assess and triage clients of shelters during weather and other types of emergencies. Experience has taught that many who arrive at shelters require clinical assistance and care.
- Interpret and implement up-to-date immunization guidelines and procedures.
- Use the Massachusetts Immunization Information System (MIIS) to track immunizations administered and to order state-supplied vaccine (MGL c.111, §.24M).
- Provide means for vaccinations, without charge, if such vaccinations are required by the board (MGL c.111, §181). Requires licensed healthcare personnel to administer such vaccinations in an appropriate and safe manner. Immunization clinics have been shown to be a highly cost-effective public health activity. Expansion of immunization clinic services during influenza season and during outbreaks is essential to limit the spread of vaccine-preventable disease.
- Receive and record reports of pulmonary and extrapulmonary tuberculosis (MGL c.111, §§7, 112, 113). Requires interpretation of medical reports and laboratory studies (105 CMR 300.140 (d) and 105 CMR 350.000).
- Investigate each reported case or suspect case of tuberculosis to determine the source and possible spread of infection to other persons. Identify contacts and determine if infected. Screen selected groups using the Mantoux tuberculin skin test procedure. Requires knowledge of the medical and epidemiologic aspects of tuberculosis, and the proper administration and interpretation of the Mantoux skin test. (MGL. c.111, s.81A)
- Assist in the identification, transportation and hospitalization of patients eligible for admission to the hospital designated by the Department of Public Health for tuberculosis treatment (MGL c.111, §94A; 105 CMR 360.000). Requires clinical case management by a registered nurse (RN).
- Provide nursing case management and ensure prompt diagnostic and follow-up examinations of patients and suspected tuberculosis cases and the uninterrupted treatment of patients with diagnosed tuberculosis (105 CMR 365.000). Requires knowledge of the epidemiology of tuberculosis and disease control methods.
- Collaborate with hospitals and other care facilities in the discharge planning for patients with confirmed or suspected tuberculosis (105 CMR 365.000). Requires knowledge of community resources, as well as knowledge of the epidemiology and treatment of tuberculosis.

- Provide appropriate case management and nursing services, under medical orders, for administration of injectable anti-tuberculosis drugs or directly observed therapy apart from a tuberculosis clinic. These services must be provided until the patient has completed therapy (105 CMR 365.000).
- Proceed with compulsory hospitalization of uncooperative tuberculosis patients after exhausting all reasonable attempts to influence the patient to accept treatment or isolation (MGL c.111, §§94A through 94C).
- Designate a staff person, or a person or agency under contract, as a clinical case manager to enforce the laws, rules and regulations pertaining to tuberculosis and related public health duties and responsibilities (105 CMR 365.000). The public health nurse has performed this responsibility and is uniquely suited to these functions.
- Manage resident aliens newly arrived in the United States, with diagnosed or suspected tuberculosis who must be identified, and complete all appropriate forms (federal P.L. 87-301). This requires the evaluation of medical records, an understanding of tuberculosis clinical guidelines and procedures and proper implementation of disease control protocols.

Public health nurses play a key role in protecting the public from potential threats arising from infectious diseases. There are a number of circumstances that present themselves to public health agencies that require clinical assessment, intervention and evaluation, and therefore necessitate professional skills, experience and knowledge consistent with those of a nurse. There are a number of legal and regulatory requirements in Massachusetts that mandate public health services that entail the involvement of a licensed healthcare professional, ideally a registered nurse.